Serial No. 10/042,278

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Canceled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with <u>underlining</u> and deleted text with <u>strikethrough</u>. The status of each claim is indicated with one of (original), (currently amended), (canceled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 15-26 and AMEND claims 1, 3-5, 8-11 and 27-29 in accordance with the following:

1. (Currently Amended) A method for computer-aided monitoring of a telecommunication network formed of devices capable of communication, said method comprising:

determining <u>training</u> activity parameters, each describing activity of at least one of a corresponding device and a corresponding service;

determining possible dependences between devices and services from the training activity parameters;

determining from the possible dependences a normal range of dependence for at least some of the devices and services in essentially undisturbed states to train a statistical estimator;

determining current activity parameters, each describing activity of at least one of a corresponding device and a corresponding service;

comparing the <u>current</u> activity parameters by a-the statistical estimator <u>with the trained</u> with training data and having a normal range of dependence based on dependences determined between the devices; and

determining from said comparing whether at least one of the devices and services in the telecommunication network has a communication performance different from the normal range of dependence in accordance with a predetermined criterion.

- 2. (Original) The method as claimed in claim 1, wherein at least some of the devices are constructed as terminals capable of communication.
- 3. (Currently Amended) The method as claimed in claim 1, wherein the <u>training</u> activity parameters are determined within a predetermined time interval.

Serial No. 10/042,278

4. (Currently Amended) The method as claimed in claim 1,

wherein said determining of each <u>training</u> activity parameter is performed by the corresponding device, and

wherein said method further comprises transmitting the <u>training</u> activity parameters to an administration unit which performs said comparing and determining based on said comparing.

- 5. (Currently Amended) The method as claimed in claim 1, wherein said determining of each <u>training</u> activity parameter is performed by <u>an a training</u> activity parameter determining unit separate from the corresponding device[[s]].
- 6. (Original) The method as claimed in claim 1, further comprising determining communication-dependent dependences between at least some of the devices and services.
- 7. (Original) The method as claimed in claim 1, further comprising determining possible directional dependences with regard to directions of communication between at least some of the devices and services.
 - 8. (Currently Amended) The method as claimed in claim 1, further comprising determining data of at least some of the devices and services, and wherein said determining of the <u>training</u> activity parameters is based on the data.
- 9. (Currently Amended) The method as claimed in claim 1, wherein said determining of the training activity parameters uses all possible pairs of the devices and pairs of services.
- 10. (Currently Amended) The method as claimed in claim 9, further comprising: storing the <u>training</u> activity parameters determined from the pairs of devices in a matrix; and

determining the normal range of dependence from a structure of the matrix.

11. (Currently Amended) The method as claimed in claim 1, wherein at least one of the following parameters is determined as one of the <u>training</u> activity parameters

data packets sent or received by the at least one of a corresponding device and a corresponding service,

processor utilization of the corresponding device,

a number of predetermined system function calls, and existence of at least one of predetermined processes and predetermined computer programs.

- 12. (Original) The method as claimed in claim 1, wherein a neuro-fuzzy model is used as the statistical estimator.
- 13. (Original) The method as claimed in claim 1, further comprising generating an alarm signal when at least one device in the telecommunication network differs from the normal range of dependence in accordance with the predetermined criterion.
 - 14. (Original) The method as claimed in claim 1, further comprising at least one of determining a disturbance of one of the devices in the telecommunication network; determining an unauthorized attempt to access one of the devices; and determining an unauthorized access attempt by one of the devices.

Claims 15-26 (Canceled).

27. (Currently Amended) A device for computer-aided monitoring of a telecommunication network formed of devices capable of communication, comprising:

at least one processor to determine <u>training</u> activity parameters, each describing activity of at least one of a corresponding device and a corresponding service, <u>to determine possible</u> <u>dependences between devices and services from the training activity parameters, to determine from the possible dependences a normal range of dependence for at least some of the devices and services in essentially undisturbed states to train a statistical estimator, to determine current activity parameters, each describing activity of at least one of a corresponding device and a corresponding service, to compare the <u>current</u> activity parameters by a-the statistical estimator <u>with the trained with training data and having a</u>-normal range of dependence-based on dependences determined between the devices, and to determine from said comparing whether at least one of the devices and services in the telecommunication network has a communication performance different from the normal range of dependence in accordance with a predetermined criterion.</u>

28. (Currently Amended) At least one computer-readable storage medium storing at least one computer program for computer-aided monitoring of a telecommunication network

formed of devices capable of communication, to control a processor to perform a method comprising:

determining <u>training</u> activity parameters, each describing activity of at least one of a corresponding device and a corresponding service;

determining possible dependences between devices and services from the training activity parameters;

determining from the possible dependences a normal range of dependence for at least some of the devices and services in essentially undisturbed states to train a statistical estimator;

determining current activity parameters, each describing activity of at least one of a corresponding device and a corresponding service;

comparing the <u>current</u> activity parameters by <u>a-the</u> statistical estimator <u>with the trained</u> with training data and having a normal range of dependence based on dependences determined between the devices; and

determining from said comparing whether at least one of the devices and services in the telecommunication network has a communication performance different from the normal range of dependence in accordance with a predetermined criterion.

2928. (Currently Amended) At least one computer-readable storage medium storing at least one computer program for computer-aided training of a statistical estimator for administering a telecommunication network formed of devices capable of communication, to control a processor to perform a method comprising:

determining <u>training</u> activity parameters, each describing activity of at least one of a corresponding device and a corresponding service;

determining possible dependences between the devices and services from the <u>training</u> activity parameters;-and

determining from the possible dependences a normal range of dependence for at least some of the devices and services in essentially undisturbed states to train the statistical estimator for determining current activity parameters, each describing activity of at least one of a corresponding device and a corresponding service and comparing the current activity parameters with the normal range of dependence.